

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

**DONNA CURLING, ET AL.,  
Plaintiffs,**

v.

**BRAD RAFFENSPERGER, ET AL.,  
Defendants.**

**Civil Action No. 1:17-CV-2989-AT**

**CURLING PLAINTIFFS' MEMORANDUM IN SUPPORT OF  
MOTION FOR PRELIMINARY INJUNCTION**

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## I. INTRODUCTION

Defendants inexplicably still refuse to adopt a secure, reliable election system in the state of Georgia. They now plan to implement a system that election security experts—including Defendants’ *own* experts—have unanimously advised against: ballot-marking devices that produce paper ballots with *barcodes* that are electronically scanned to capture voters’ selections. It is undisputed that voters cannot read those barcodes, thereby leaving them with no ability to verify that the electronic system records the selections they actually made. This alone renders the system unconstitutional given the extraordinary vulnerabilities still present in Georgia’s voting system and the well-established environment of advanced persistent threats to any election system that continues to rely on electronic voting machines rather than hand-marked paper ballots.<sup>1</sup>

Defendants’ selection of the Dominion BMD-based system (the “Proposed Election System”) is truly incomprehensible. Not only will it cost tens of millions of dollars more than hand-marked paper ballots and involve far greater effort and

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<sup>1</sup> Curling Plaintiffs incorporate by reference prior preliminary injunction briefs, hearing transcripts, and exhibits rather than repeat facts or arguments regarding Defendants’ failure to protect Georgia’s election system. Many of the vulnerabilities, insecurities, and unreliability of the current election system will persist with the new system planned for next year.

resources with respect to the equipment, training, personnel, and facilities needed, but not a single reputable election security expert supports it. The sole election security expert hand-selected by Governor Brian Kemp, Dr. Wenke Lee, to serve on the commission tasked with recommending a new system to replace the woefully-inadequate GEMS/DRE system, advised against the forthcoming BMD-based system even before it was adopted, as did Defendants' other hand-selected election security expert, Dr. Michael Shamos. That Defendants adopted a system against the advice of their own election security experts is not only baffling but confirms the system's unreliability.

Defendants must not be allowed to replace one unconstitutional election system with another at the expense of Curling Plaintiffs and all other Georgia voters. First, the Proposed Election System is no less vulnerable in any meaningful sense to advanced threats of hacking and vote manipulation than the unconstitutional GEMS/DRE system. Second, the Proposed Election System counts votes by printing and scanning unreadable 2D barcodes. As Plaintiffs have previously emphasized and the Court observed, “no elector can visually review and confirm whether the barcode accurately conveys her votes actually cast, as filled out on the BMD screen or appearing on the printout.” (Dkt. No. 579 at 9 n.10.) Third, the system does not require audits sufficient to identify systemic errors caused by

hacking or vote manipulation. For these reasons, Curling Plaintiffs seek preliminary injunctive relief against the statewide roll-out of the newly chosen Dominion BMD-based system as the primary voting option for in-person voting for 2020 and beyond, as planned by Defendants.

The relief Curling Plaintiffs seek is entirely feasible and readily implemented by the 2020 elections. As the Court observed, the national consensus among election security and cybersecurity experts is that all elections “should be conducted using human-readable paper ballots.” (Dkt. No. 579 at 40 (quoting NAS Report at 80).)<sup>2</sup> The Court also already found that “the scanning technology provided by Dominion under the State’s contract and funds authorized in connection with HB 316” could be used to implement a constitutionally-acceptable hand-marked paper ballot voting system. (*Id.* at 146.) And Defendants already are piloting such a system this year,

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<sup>2</sup> National Academies of Sciences, Engineering, and Medicine, et al., Securing the Vote: Protecting American Democracy 109 (2018) [hereinafter NAS Report]. *See also* S. Comm. on Intelligence, Russian Active Measures Campaigns and Interference in the 2016 U.S. Election, Vol. 1: Russian Efforts Against Election Infrastructure with Additional Views, S. Rep. No. 116-XX at 58 (1st Sess. 2019) (partially redacted) [hereinafter SSCI Report]; Andrea Córdova McCadney, Elizabeth Howard, & Lawrence Norden, Voting Machine Security: Where We Stand Six Months Before the New Hampshire Primary, Brennan Center for Justice (Aug. 13, 2019), [https://www.brennancenter.org/analysis/voting-machine-security-where-we-stand-six-months-new-hampshire-primary#\\_ednref18](https://www.brennancenter.org/analysis/voting-machine-security-where-we-stand-six-months-new-hampshire-primary#_ednref18).

which will prepare them to implement one statewide by the 2020 elections in lieu of the BMD-based system their own experts advise against.

With each action Defendants have taken since the commencement of this lawsuit, Defendants' inability—or perhaps refusal—to administer an election system with the constitutional minimum level of care has been thrown into starker relief: the wiping of the CES/KSU server, the misleading sworn testimony of Mr. Merritt Beaver in August 2018, and again this summer, the meritless Eleventh Circuit appeal, the Secretary of State's failure to remediate dozens of vulnerabilities documented by Fortalice Systems and emphasized by Dr. Michael Shamos, the repeated instances when the state's voter registration and other important election-related information was left unprotected and potentially improperly accessed, the transparent effort to delay and obstruct the resolution of this litigation until the consequential 2020 elections are over, and the inexplicable refusal to allow any expert to conduct the sort of forensic analysis of the state's election system their own expert emphasized. The record is already replete with evidence that Defendants cannot be trusted to implement, operate, and secure a reliable electronic-based system that protects the right to vote—"the beating heart of democracy." *League of Women Voters of Fla., Inc. v. Detzner*, 314 F. Supp. 3d 1205, 1215 (N.D. Fla. 2018).

This Court needs to intervene again to do what Defendants refuse to do: protect Georgians' constitutional right to vote.

Curling Plaintiffs respectfully submit that, given the extensive record already developed in this case, the Court can decide this Motion with far fewer resources than the previous preliminary injunction motions involved. Indeed, the key facts are undisputed, including Defendants' own experts' advice against the Proposed Election System. Accordingly, Curling Plaintiffs request expedited treatment of this Motion, especially given the critical importance of the 2020 elections and the threats Georgia voters will face absent relief.

## **II. STATEMENT OF FACTS**

In April 2019, Georgia enacted Act 24, amending the Georgia Election Code and providing for a new election system. On July 29, 2019, Defendants confirmed their intent to award the contract for the Proposed Election System to Dominion Voting Systems, Inc. ("Dominion").<sup>3</sup> According to the Contract, Defendants

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<sup>3</sup> Cross Decl. Ex. 2, Final Contract at Ex. B, Dominion Solution Order (the "Contract"), § 3.1 (p. 54). The Notice of Intent to Award the Contract for the Proposed Election System issued the Monday morning following the Friday evening conclusion of this Court's hearing on Plaintiffs' prior motions for preliminary injunctive relief. (Dkt. Nos. 552, 555.) The Notice of Award issued 11 days later, after the required protest period had passed and the Secretary of State certified the Proposed Election System. (Dkt. No. 575.)

purchased a system comprised principally of “ImageCast X-Prime BMDs” (machines that produce barcoded ballots), and “ImageCast Precinct Scanner and Tabulators” and “ImageCast Central Scanners” (machines that read barcoded ballots). “The printed ballot contains a written summary of the voter’s choices, as well as a 2D barcode which is read by Dominion’s ImageCast Precinct or Central tabulator.” (Contract § 3.1.) Under the Proposed Election System, ballot scanners tabulate votes based on the 2D barcode, not the written text summary. (*Id.*)

The Proposed Election System remains vulnerable to malware interference and corruption, does not provide a meaningful way for a voter to verify his or her individual vote, and does not provide for audits sufficient to protect the integrity of the overall vote results in the vast majority of races. (Halderman Decl. ¶¶ 3-8, 12-15, 20, 22.) The use of barcodes to encode votes for tabulation runs counter to long-standing recommendations of election security experts.<sup>4</sup> While the Proposed Election System purports to provide a voter with a verifiable voting record, the voter

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<sup>4</sup> See Kimberly Breedon & A. Christopher Bryant, *Counting the Votes: Electronic Voting Irregularities, Election Integrity, and Public Corruption*, 49 U. Mem. L. Rev. 979, 989 (2019) (with a barcode, “voter verification is impossible because the voter cannot decipher the barcoded information, and it is only the barcode that is used to count the votes. . . . [S]uch technology creates an opportunity for malign actors to flip or otherwise alter votes by manipulating programming codes in advance or by hacking the technology remotely.”) (citations omitted).

is only able to read the written text summary and not the barcode that the BMD prints and that the ballot scanner counts. Thus, no voter can review and confirm whether the barcode accurately conveys his or her intended selections. (*Cf.* Dkt. No. 579 at 9 n.10, 137.) In other words, just as with the GEMS/DRE system this Court already found so unreliable as to be unconstitutional, the Proposed Election System prevents voters from verifying that their votes are actually counted as intended.

Like any computer, a BMD is vulnerable to intentional forms of manipulation (such as hacking, installation of malware, or alteration of installed software), as well as unintentional forms of manipulation or corruption. (Dkt. No. 510-2, Appel Decl. ¶ 18; *see also id.* ¶¶ 21-27 (describing susceptibility of any voting machine directly or indirectly exposed to the Internet to hacking).) Indeed, specific vulnerabilities have already been identified with Dominion’s election software and hardware. Dominion’s election system was certified under a 14-year old standard (Voluntary Voting System Guidelines (“VVSG”) 1.0) rather than the more recent VVSG 1.1 or VVSG 2.0 standards. (Cross Decl. Ex. 1, Pro V&V Test Report at 2, 18.) Dominion admitted that the device relies on software released in February 2015, which has not received security updates since March 2018. (Halderman Decl. ¶ 22.)

In February 2019, Texas voting systems examiners refused to certify Dominion’s election management system based upon several problems with the

software.<sup>5</sup> According to these examiners, “several of the problems did not appear to have ready-made or simple solutions.”<sup>6</sup> Problems included:

- Dominion’s hardware is able to be connected to the internet;
- If the printer tray became ajar during the voting process, the system wipes out all selections and requires a voter to start over, requiring poll worker intervention and slowing down the voting process;
- Voter selections are stored in sequential order, which would permit the secrecy of the ballot box to be compromised;
- Portions of the power cord connections are easily accessible and may be unplugged by anyone;
- Paths for import of election data into the election management program create multiple opportunities for mistakes and during testing required three separate restarts of the adjudication process;
- Paper jams are frequent and the paper jam clearing mechanism permits fraud or unauthorized manipulation;
- Scanned ballot images are of poor quality, making write-in selections written in ballpoint pen illegible;
- Doors covering data and power ports do not sufficiently protect against a bad actor connecting an unauthorized USB device.

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<sup>5</sup> Dkt. No. 586 at 20 (citing Tex. Sec’y of State, *January 16-17, 2019 – Examiner Reports of Dominion Voting System Democracy Suite 5.5*, [https://www.sos.texas.gov/elections/laws/jan2019\\_dominion.shtml](https://www.sos.texas.gov/elections/laws/jan2019_dominion.shtml) (last visited Oct. 3, 2019)).

<sup>6</sup> Brandon Hurley, *Inspection of the Dominion Voting Systems’ Democracy Suite 5.5 conducted on January 16 and 17, 2019*, Tex. Sec’y of State, at 2 (Feb. 15, 2019), <https://www.sos.texas.gov/elections/forms/sysexam/jan2019-hurley.pdf> [hereinafter Hurley Letter].

(Hurley Letter at 2-5<sup>7</sup>; Halderman Decl. ¶ 20.) Finally, the precinct scanners lack a memory-management unit, causing them to need rebooting after scanning approximately 4,000 ballots, and broadly suggesting that the scanner is based on hardware and software significantly out of date and out of step with best practices. (Halderman Decl. ¶ 21.)

Moreover, during the 2019 DEF CON Voting Machine Hacking Village, participating hackers probed a Dominion ImageCast Precinct device, which is a hybrid BMD and ballot scanner in the same line of equipment that will be used in the Proposed Election System.<sup>8</sup> Participants identified 20 medium to high level vulnerabilities in the application the device runs, including the ability of remote attackers to implement a DNS attack.<sup>9</sup> They found an exposed flash card containing an .xml file that, if manipulated, would allow scanned votes to be redirected to a different candidate. Using “secure screw tips” purchased from a nearby electronics

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<sup>7</sup> See also Brian Mechler, *Voting System Examination of Dominion Voting Systems Democracy Suite 5.5*, Tex. Sec'y of State, at 13 (Feb. 15, 2019) (“There was not a single component examined [of the Dominion Voting Systems Democracy Suite 5.5] that I would recommend for use in elections in the State of Texas.”), <https://www.sos.texas.gov/elections/forms/sysexam/jan2019-mechler.pdf>.

<sup>8</sup> Cross Decl. Ex. 3, DEF CON 27 Voting Machine Hacking Village Report (“DEF CON Report”) at 18-19.

<sup>9</sup> See @VotingVillageDC, Twitter (Aug. 11, 2019 2:26 PM), <https://twitter.com/VotingVillageDC/status/1160663776884154369?s=20>.

store for under \$28, they loaded an operating system of their choice to the ImageCast Precinct and used its screen to play the video game “Pong.” (DEF CON Report at 19.) These BMD systems thus suffer from demonstrated security vulnerabilities of the same nature as those that plague Georgia’s GEMS/DRE system. Alongside these new vulnerabilities, some of the old ones are certain to persist, and others could provide footholds for new attacks on the Proposed Election System. (Dkt. No. 597-1 ¶¶ 3-4; Halderman Decl. ¶ 3.)

These many vulnerabilities could cause the BMDs to print barcodes that do not match what the voter entered and thus cause a ballot scanner to improperly tabulate votes against the intent of the voter. If the barcode is inconsistent with the voter’s intent, the voter has no way of knowing. (Halderman Decl. ¶ 6.)<sup>10</sup> Georgia law does not require and Defendants have never committed to the kind of audits necessary to detect an attack of this kind. (Halderman Decl. ¶¶ 7-8.)

Voter behavior further compounds the inability to verify vote results under the Proposed Election System. Even if the barcode is consistent with the text summary, both may be inconsistent with the voter’s intent and remain undetected.

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<sup>10</sup> See also Cross Decl. Ex. 4, Andrew W. Appel, Richard A. DeMillo, & Philip B. Stark, Ballot-marking devices (BMDs) cannot assure the will of the voters 16-17 (2019) [hereinafter Appel et. al.].)

Many (if not most) voters do not or cannot verify human-readable summaries produced by machines even when specifically directed to do so, or are unable to recall details of the ballots they cast even moments before. (*Id.* ¶¶ 12-14 (only 6.5% of unprompted participants in controlled experiment noticed when votes had been changed); Appel et al. at 9 (citing research that voters fail to recognize errors in ballots presented to them for verification or fail to recognize that the presented ballots were not theirs); *accord* Dkt. No. 615-2 (“Lee I”) at 2-3.)

Any attack would be highly difficult to catch. On those occasions where voters do notice a discrepancy, research suggests that they are far more likely to attribute it to their own mistake. It is unlikely a sufficient number of voters would complain; thus, poll workers would be unlikely to notice systemic failure or manipulation. (Halderman Decl. ¶ 15.) Even State Defendants’ own election security expert, Dr. Shamos, advised against the Proposed Election System, testifying that if a BMD is going to be used at all, the more reliable approach is to use a BMD that does not rely on a barcode. (Dkt. No. 554, Shamos Dep. at 56:13-57:2, 57:13-21.)

Based on these deep flaws, Georgia voters can have no reasonable certainty that the Proposed Election System will accurately count their votes: they are told it remains excessively vulnerable to cyber-attacks, they have no means of verifying

their individual votes, and they cannot rely on Defendants to ensure the integrity of the system as a whole.

### **III. ARGUMENT**

As this Court found twice previously, Plaintiffs readily meet the requirements necessary for this Court to issue a preliminary injunction. *See League of Women Voters of Fla.*, 314 F. Supp. 3d at 1215 (citing *Siegel v. LePore*, 234 F.3d 1163, 1176 (11th Cir. 2000)). Plaintiffs are likely to succeed again in proving a violation of the Equal Protection and Due Process Clauses of the Fourteenth Amendment. U.S. Const. amend. XIV, § 1. Forcing Plaintiffs to use BMD-generated barcode ballots to vote in-person imposes an unconstitutional burden given the unverifiable nature of such a system and the persistent threats of hacking and vote manipulation in today's environment.<sup>11</sup>

Defendants must show a compelling state interest in the use of the Proposed Election System to justify this severe burden. They cannot. In fact, they can offer no need—or reason—at all for using computer-generated, unreadable barcodes to

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<sup>11</sup> As this Court lamented in its August 15, 2019 order, “the Secretary of State’s efforts in monitoring the security of its voting systems have been lax at best – a clear indication that Georgia’s computerized election system is vulnerable in actual use.” (Dkt. No. 579 at 44.) Continuing to rely on a voting system necessarily dependent on the security and functionality of computer software introduces unnecessary insecurity and unreliability into Georgia’s elections.

tabulate votes. Moreover, their use undermines important state interests in preventing fraud and promoting voter confidence. The State's own expert in this case and the lone cybersecurity expert on the State's SAFE Commission each expressly advised against the use of BMDs and election systems relying on barcoded ballots. (Dkt. No. 554 at 57:14-21 (Q: "You agree that if a BMD is going to be used, the more reliable approach is one that is readable by the human voter, and that what's going to get tallied is what they can actually read themselves; is that fair?" [Objection] A: Yes, I agree.").)<sup>12</sup>

As before, the other preliminary injunction factors favor Curling Plaintiffs as well. They will unquestionably suffer irreparable injury absent relief—such injury is presumed in cases involving the right to vote. Because the injury to Curling

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<sup>12</sup> See also Lee I at 2 ("[T]o have a voter cast his vote on a [BMD] with a cyber component, and print out a paper receipt that the voter would verify" is "much less desirable" than "hand-marked paper ballots, [where] a voter both casts and verifies" his or her selections, in part because the BMD "may have a vulnerability that could be exploited to change votes."). Post-election audits do not alleviate Dr. Lee's concerns: "A manual count absolutely cannot rely upon a barcode, QR code, or any other kind of encoding scheme that is readable only by a machine because the cyber system that reads those codes also can be compromised and lie to the voter or auditor." (*Id.* at 2; see also Dkt. No. 615-3 ("Lee II") at 2 ("[I]t is meaningless to perform a post-election audit on printouts that cannot be guaranteed to be valid in the first place; the audit would just be 'garbage-in, garbage-out,' and perhaps worse, give a false sense of accuracy or legitimacy of the election results.")); Dkt. No. 554 at 57:23-58:12.)

Plaintiffs far outweighs any injury to the State Defendants in not implementing the Proposed Election System, and because the public interest favors an injunction, injunctive relief should issue.

#### **A. Curling Plaintiffs Are Likely to Succeed on the Merits**

##### **1. Curling Plaintiffs Have Standing**

Each Curling Plaintiff meets requirements for standing: (1) each has suffered—and faces an imminent prospect of suffering in the future—invasions of their right to vote resulting in “concrete and particularized” injuries; (2) their injuries were caused by Defendant’s actions; and (3) their injuries or threat of injuries are likely to be redressed by the relief they seek. *Common Cause/Ga. v. Billups*, 554 F.3d 1340, 1349 (11th Cir. 2009).

The Court found Curling Plaintiffs had standing for their claims in September 2018 and August 2019. *Curling v. Kemp*, 334 F. Supp. 3d 1303, 1314-18 (N.D. Ga. 2018); Dkt. No. 579 at 12-20. For the March 24, 2020 presidential preference primary and subsequent elections, each Plaintiff will be required either to vote in person using BMDs producing barcoded ballots or to go through the burdensome process of voting absentee. See *Common Cause/Ga.*, 554 F.3d at 1351-52 (“Requiring a registered voter either to produce photo identification to vote in person or to cast an absentee or provisional ballot is an injury sufficient for standing.”).

Curling Plaintiffs have a “fundamental right to participate in an election process that accurately and reliably records their votes and protects the privacy of their votes and personal information.” *Curling*, 334 F. Supp. 3d at 1315. They each therefore suffer imminent and actual harm so long as barcoded ballots are to be the method of voting in Georgia because each plans to vote in 2020 elections. (Curling Decl. ¶ 4; Price Decl. ¶ 4; Schoenberg Decl. ¶ 4.) Defendants’ use of the Proposed Election System is also the cause of Curling Plaintiffs’ respective injuries. Finally, as with injuries inflicted by Defendants’ use of the GEMS/DRE system, the Court can redress Curling Plaintiffs’ injuries attributable to the use of barcoded ballots.

Curling Plaintiffs seek the next logical step from this Court—an order that bars Defendants from using the Proposed Election System. This relief is easily implemented and highly feasible. Defendants can readily move to hand-marked paper ballots, the most secure and cost-effective method of voting. At least one state contracting with Dominion for election system equipment has already banned barcode ballots because of these vulnerabilities.<sup>13</sup>

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<sup>13</sup> Kevin Collier, *First on CNN: Colorado becomes first state to ban barcodes for counting votes over security concerns*, CNN (Sept. 16, 2019), <https://www.cnn.com/2019/09/16/politics/colorado-qr-codes-votes/index.html>.

Consistent with the Court’s Order and evidence of record, Curling Plaintiffs ask that the Court require Defendants to administer auditable hand-marked paper ballots as the primary method of voting in Georgia—in other words, to follow the approach most highly recommended by experts and law enforcement officials nationwide. Each of the Plaintiffs has standing to seek such relief.<sup>14</sup>

## 2. *Curling Plaintiffs Are Likely to Succeed on Their Constitutional Claims*

“Voting is, indisputably, a right of the most fundamental significance under our constitutional structure.” *Burdick v. Takushi*, 504 U.S. 428, 433 (1992) (internal quotation marks and citation omitted). In evaluating a state’s election law imposing restrictions on the right to vote, courts utilize a “sliding-scale balancing analysis.” *League of Women Voters of Fla.*, 314 F. Supp. 3d at 1215.<sup>15</sup> The Court “must weigh ‘the character and magnitude of the asserted injury to’” the right to vote “against ‘the precise interests put forward by the State as justification for the burden imposed by its rule,’” and the extent to which those interests make the burden

<sup>14</sup> The Court has already ruled that State Defendants are proper parties to this lawsuit. (Dkt. No. 579 at 19-20.)

<sup>15</sup> Because courts have applied the *Burdick-Anderson* test to claims involving the right to vote under both the Equal Protection and Due Process Clauses, Curling Plaintiffs address both claims together for purposes of seeking injunctive relief. See, e.g., *League of Women Voters of Fla.*, 314 F. Supp. 3d at 1215 (applying *Burdick-Anderson* to claims asserted under First and Fourteenth Amendments).

necessary. *Burdick*, 504 U.S. at 434 (quoting *Anderson v. Celebrezze*, 460 U.S. 780, 789 (1983)). Where, as here, the burden on the right to vote is severe, Defendants must show a compelling state interest that justifies the burden imposed and the restriction must be narrowly tailored to that interest. *League of Women Voters of Fla.*, 314 F. Supp. 3d at 1215.

Defendants' intended use of barcoded ballots severely burdens Curling Plaintiffs' exercise of their right to vote. The Proposed Election System maintains serious security flaws at every level, including: (1) persisting in using machines that both are susceptible to viruses and other malicious code and produce unverifiable results; (2) memory cards that can be easily compromised and used as a vehicle for malicious code; and (3) issuing ballots that the voter has no opportunity or capacity to verify accurately reflects his or her choices. (Dkt. No. 387-2 at ¶¶ 12-13; Appel et al. *passim*.) It is also highly likely that an attack would be undetectable or unknown, not least because the State has declined to forensically examine its own systems to look for one. (Dkt. No. 579 at 55, 62.)

As the Court has previously noted in its Orders, it must not “review such claims in a vacuum but do so with a focus on the real-world justifications and implications of [Defendants’] decision[s].” *Stewart v. Blackwell*, 444 F.3d 843, 876 (6th Cir. 2006). The Court found that U.S. and Georgia elections alike are targets of

hackers seeking to disrupt the voting process. (Dkt. No. 579 at 37-42 (discussing NAS Report and SSCI Report findings).)<sup>16</sup> Defendants' lax conduct only intensifies the burden on Curling Plaintiffs' rights. (*Id.* at 62 ("Georgia's election system is not in fact an impenetrable secure air gapped system safe from intrusion or an advanced persistent threat.").) Inherent risk, actual threat, persistent inaction—all compound the severe burden on Curling Plaintiffs' right to vote.

Experts view Georgia's decision to use BMDs and ballot scanners using 2D barcodes to tabulate votes as inherently insecure. The Proposed Election System defeats auditability because an auditor cannot determine whether the machines captured the voters' intent: a human auditor cannot read the barcode, and most voters as an empirical matter do not or cannot verify the written summary accompanying the barcode under election conditions. (Halderman Decl. ¶¶ 13-15.) There is no guarantee, whether due to miscoding, firmware malfunction, hacking, or other error that the barcode read by scanners to count the votes matches the text

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<sup>16</sup> See also Robert S. Mueller, Report on the Investigation into Russian Interference in the 2016 Presidential Election 113 (2019) ("Officers from Unit 74455 separately hacked computers belonging to state boards of elections, secretaries of state, and US companies that supplied software and other technology related to the administration of US elections."); Dkt. No. 375 at 30-31.

summary provided elsewhere on the ballot. Thus, a barcode-ballot-based election system cannot produce an auditable record.

To impose this burden on Curling Plaintiffs' fundamental right to vote, Defendants must show significant, "precise" interests that "explain why it is necessary to burden the plaintiff's rights," and show that the burden is narrowly tailored to further that interest. *League of Women Voters of Fla.*, 314 F. Supp. 3d at 1220 (internal quotation marks and citation omitted). They have not and cannot. A defense that it is difficult or expensive to implement a system of hand-marked paper ballots is meritless. "Administrative convenience is simply not a compelling justification in light of the fundamental nature of the right." *Stewart*, 444 F.3d at 869 (citing *Frontiero v. Richardson*, 411 U.S. 677, 690 (1973) (plurality)).

Defendants' repeated insistence on their way or the proverbial highway—in the face of this Court's repeated findings that the State buried its head in the sand and lacked candor and competency in protecting Georgia's election system—undermines important state interests in safeguarding voter confidence and preserving election integrity from technological breakdowns or malign interference.

As the Court stated in its August 15, 2019 order:

The Plaintiffs' voting claims go to the heart of a functioning democracy. As the Court commented in its Order last year, "[a] wound or reasonably threatened wound to the integrity of a state's election system carries grave consequences beyond the results in any specific

election, as it pierces citizens’ confidence in the electoral system and the value of voting.” The reality and public significance of the wounds here should be evident – and were last year as well.

(Dkt. No. 579 at 151 (citing *Curling*, 334 F. Supp. 3d at 1328).) The actual threat to Curling Plaintiffs’ right to vote, let alone to voter confidence, looms anew due to the State’s insistence on using the Proposed Election System. Curling Plaintiffs’ evidence shows that this new threat is just as dire and just as capable of remedy via the use of the “gold standard” of election security: hand-marked paper ballots for all who can feasibly use them. There is no reason why this debasement of Georgia voters’ rights should begin, much less become the new normal, where a less restrictive (and far less expensive) alternative is readily available.

Defendants cannot hide behind any notion that the Proposed Election System reflects the will of the people and the judgment of the legislature. The Proposed Election system actually violates the newly amended Georgia Election Code. Act 24 provides that “electronic ballot markers shall produce paper ballots which are marked with the elector’s choices *in a format readable by the elector.*” O.C.G.A. § 21-2-300(a)(2) (emphasis added); *see also* O.C.G.A. § 21-2-379.22(6).<sup>17</sup> However,

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<sup>17</sup> “Scanning ballot” is defined, in relevant part, as “a printed paper ballot designed to be marked by an elector with a ballot marking device or electronic ballot marker or a blank sheet of paper designed to be used in a ballot marking device or electronic ballot marker, which is then inserted for casting into a ballot scanner.” O.C.G.A. § 21-2-2(32.1). “Electronic ballot marker” is defined, in relevant part, as “an

instead of producing “paper ballots which are marked with the elector’s choices in a format readable by the elector,” the Dominion BMD produces an illegible 2D barcode used to tabulate the elector’s choices. This is not the “elector verifiable paper ballot” contemplated by Sections 21-2-2(7.1) and 21-2-300.

Curling Plaintiffs are likely to succeed on the merits of their claims.

**B. Curling Plaintiffs Will Unquestionably Suffer Irreparable Injury Absent Court Intervention**

A threatened, ongoing injury burdening and depriving Georgia electors of their respective fundamental rights to vote is irreparable. (Dkt. No. 579 at 130-31.) *See League of Women Voters of N.C. v North Carolina*, 769 F.3d 224, 247 (4th Cir. 2014) (impairment of right to vote cannot be undone or adequately redressed once an election occurs). Georgia’s intended use of BMD-marked barcoded ballots imminently and irreparably harms Curling Plaintiffs, “even if such conduct does not completely deny Plaintiffs the right to vote.” *Curling*, 334 F. Supp. 3d at 1322. (citation omitted); *see also Larios v. Cox*, 305 F. Supp. 2d 1335, 1343 (N.D. Ga. 2004) (“To the extent that a citizen’s right to vote is debased, he is that much less of a citizen.”) (citation omitted).

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electronic device that . . . uses electronic technology to independently and privately mark a paper ballot at the direction of an elector . . . and print ***an elector verifiable paper ballot.***” O.C.G.A. § 21-2-2(7.1) (emphasis added).

This system is no more constitutional than the GEMS/DRE system found to warrant preliminary injunctive relief just this August. As this Court found, state use of an election system threatening that Curling Plaintiffs' votes will not be counted accurately or equally in upcoming elections constitutes "real risk of suffering [of] irreparable injury without court intervention." *Curling*, 334 F. Supp. 3d at 1325-26. The same finding is warranted here because the Proposed Election System poses the same threat.

**C. Balancing the Equities and Considering the Public Interest Heavily Favor Injunctive Relief**

Any burden injunctive relief would place on Defendants is far outweighed by the ongoing injury to Curling Plaintiffs if relief is not granted. Curling Plaintiffs have shown, and this Court has recognized, the "threat of real harms" to the constitutional interests at stake in this case. *Curling*, 334 F. Supp. 3d at 1326. The injunction Curling Plaintiffs seek would free them from known, preventable risk that election interference or machine error may alter or eliminate their votes entirely. (Curling Decl. ¶ 8; Price Decl. ¶ 12; Schoenberg Decl. ¶ 11.) A preliminary injunction is also in the public's best interest because it would enhance the integrity of the electoral processes that are "essential to the functioning of our participatory democracy." *Purcell v. Gonzalez*, 549 U.S. 1, 4 (2006).

Defendants cannot seriously demonstrate injury resulting from the relief that Curling Plaintiffs request. The cost and time it would take for Defendants to move to hand-marked paper ballots do not outweigh Curling Plaintiffs' significant constitutional interests. Only seven counties are enrolled in the State's November 2019 Dominion pilot program, and some baseline number of BMDs are necessary in any case for voters unable physically to hand-mark ballots; the relief requested hardly poses a hardship even on an expedited timetable.<sup>18</sup> Statewide, Defendants must correctly configure printers and supply them with paper and ink. They must train officials and poll workers, and design audit procedures. That is not injury but the duty of their office. Relief might even save Defendants from a roll-out they are not capable of managing. (Dkt. No. 579 at 142-45 ("the Court has reason to doubt" the Proposed Election System will be ready by March 2020).)<sup>19</sup>

Much of the Dominion equipment can be used in a constitutional manner. As the Court has acknowledged, the State's RFP initially called for "rapid full ballot image/ballot counting scanners for absentee and provisional ballots." (Dkt. No. 579

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<sup>18</sup> See Dkt. No. 599 at 16 n.5 (listing six counties enrolled in Dominion pilot program for November 2019, along with four municipalities in Cobb County enrolled in hand-marked paper ballot pilot program using Dominion scanners and Poll Pads).

<sup>19</sup> See also Dkt. No. 570 at 52:23-53:22 (testimony of M. Beaver: "It's tight"); Contract, Att. 4 & App'x A (detailed Dominion implementation schedule).

at 9 n.10.) The Dominion precinct and central scanners can count hand-marked paper ballots, like those that voters will continue to use when voting absentee by mail or voting provisionally. (Contract, §§ 4-5 (pp. 54-55) (describing central and precinct scanner capacity to, *inter alia*, interpret voter marks on a paper ballot and to capture scanned images of ballot and to record text showing each mark as interpreted by the scanner); Halderman Decl. ¶¶ 9-11.) This capacity to scan full-face hand-marked paper ballots was specifically promoted by Dominion and by the State Defendants and provided confidence in the Proposed Election System to election officials. Pivoting to this method now is all the more reason to avoid implementing an unconstitutional voting method.<sup>20</sup>

Having traveled this far down the path toward the Proposed Election System, and as is evident in the Contract, Georgia can immediately convert to an auditable, accountable system of voter-verified paper ballots, using the same equipment it has already purchased or announced its intent to purchase. The injury to Curling Plaintiffs far outweighs any injury to the State Defendants in implementing human-

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<sup>20</sup> The printers specified by Dominion's final contract with the State for connecting to the BMDs are off-the-shelf HP LaserJet Pro M402dne laser printers. (Contract, Ex. B, § 3.2 (page 54).)

readable paper ballots. An injunction is unquestionably in the public's interest. Injunctive relief therefore should issue without delay.

#### **IV. REQUESTED RELIEF**

The vulnerabilities demonstrated by Curling Plaintiffs and the supporting evidence offered by election security experts throughout this litigation show that the Proposed Election System violates the Fourteenth Amendment to the U.S. Constitution. Georgia elections simply cannot continue to evade scrutiny and auditability, and must be conducted securely, reliably, accurately, and verifiably.

Thus, Curling Plaintiffs request that the Court:

1. Declare that Defendants have violated the Fourteenth Amendment to the U.S. Constitution and 42 U.S.C. § 1983;
2. Order injunctive relief prohibiting Defendants, after January 1, 2020, from using any system or devices for voting, including, but not limited to, the Proposed Election System, that does not use hand-marked paper ballots as the primary method of recording the elector's votes;
3. Order injunctive relief directing Defendants to file a plan in sufficient detail for the Court to evaluate, providing specific steps Defendants will take to comply with the terms of the Court's Order, including provisions for implementing the hand-marked paper ballot system and for pre-certification, post-election, manual tabulation audits, such plan to be filed within 25 days of the entry of the Court's Order;
4. Award Curling Plaintiffs their attorneys' fees and costs under 42 U.S.C. § 1988 for the deprivation of civil rights arising from Defendants' attempted use of the Proposed Election System, causing 42 U.S.C. § 1983 violations; and
5. Grant all other relief this Court deems proper.

Dated: October 4, 2019

Respectfully submitted,

/s/ David D. Cross

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**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

**DONNA CURLING, ET AL.,  
Plaintiffs,**

v.

**BRAD RAFFENSPERGER, ET AL.,  
Defendants.**

**Civil Action No. 1:17-CV-2989-AT**

**CERTIFICATE OF COMPLIANCE**

Pursuant to LR 7.1(D), I hereby certify that the foregoing document has been prepared in accordance with the font type and margin requirements of LR 5.1, using font type of Times New Roman and a point size of 14.

*/s/ David D. Cross*  
David D. Cross

**IN THE UNITED STATES DISTRICT COURT  
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**Defendants.**

**Civil Action No. 1:17-CV-2989-AT**

**CERTIFICATE OF SERVICE**

I hereby certify that on October 4, 2019, a copy of the foregoing **CURLING PLAINTIFFS' MEMORANDUM IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION** was electronically filed with the Clerk of Court using the CM/ECF system, which will automatically send notification of such filing to all attorneys of record.

*/s/ David D. Cross*  
David D. Cross